What is claimed is:

1. A method for dataflow management in interactive communications networks, the method comprising the steps of:

5   determining characteristics of network components; and

        managing dataflow in accordance with said determined characteristics.

2. A method for targeting content to users in a communications network; the method comprising the steps of:

10   determining targeted user characteristics; and

        presenting content in accordance with said characteristics.

3. The method according to claim 1, for targeted content presentation in a communications network for regularly scheduled content opportunities, the

15   method comprising the steps of:

        monitoring the programming stream for opportunities and content descriptors;

        determining the source for alternate content;

        matching the opportunity to the available content and the viewer

20   characteristics;

        presenting content to the viewer; and

        updating the secure audit log with the viewing result.

4. The method according to claim 2, further including the step of updating the

25   secure audit log with the viewing result.

5. The method according to claim 1, for targeted content presentation in a communications network for functional/user interaction content opportunities, the method comprising the steps of:

30   monitoring the programming and content streams for opportunities and content descriptors;

        pre-matching the opportunities to the available content and viewer characteristics;

determining the source for alternate content as described previously;

checking security rights at a function invocation to determine appropriateness of content insertion;

presenting the content to the viewer if appropriate; and

5   updating pre-matched opportunities for next function invocation.

6. The method according to claim 4, further including the step of updating the secure audit log with the viewing result.

10   7. A method according to claim 2, further including the steps of:

monitoring the content descriptor transmission stream;

matching the opportunity map descriptors with the receiver capabilities;

verifying that permission is available to access the content;

matching of the content descriptors to the viewer profile information;

15   selecting the descriptors with the strongest content match if local persistent storage is available to the MDE;

determining if the content is already in storage;

determining if the content can be acquired in a timely manner;

verifying access rights to storage

20   if access rights are verified, verifying availability of storage;

determining if content can be deleted to make storage available by comparing matches of the new content with existing content in storage, and replacing content with weaker matches to make storage available;

acquiring content from the designated source; and

25   placing acquired content in storage.

8. The method according to claim 2, whereby the ME/DE also forwards configuration triggers that indicate to the MDE if certain components need to be replaced to enable dynamic adaptation of the system to new feedback

30   algorithms, better functional capability, and/or component code fixes.

9. The method according to claim 2, whereby the MDE also receives profile characteristic information on the viewers from the operator.

10. The method according to claim 2, wherein the viewers profile data is encrypted to prevent unauthorized access.

11. The method according to claim 2, wherein the data is kept in encrypted format within the facilities of a CA system.

12. The method according to claim 2, wherein a plurality of instances of the MDE can be generated to match one or more of the capabilities and requirements of the system and the capabilities of the various receiver models on the network

13. A system for targeting content to users in a communications network comprising:

    means for determining targeted user characteristics; and

    means for presenting content in accordance with said characteristics.

14. The system according to claim 13, for targeted content presentation in a communications network, the system comprising:

    a head end component having:

        a content schedule component having:

            a content schedule database; and

            a content scheduler for accessing the content schedule database to provide schedule triggers;

        a profile component having:

            a profile database; and

            a profile scheduler for accessing the profile database to provide profile triggers;

        a matching engine for accessing the content schedule and profile components to match content to end-users;

        a delivery engine for delivering the matched content; and

        a combiner that receives the delivered matched content and combines it with available content streams;

    a receiver component having:

        a data filter for filtering data; and

a microdecision engine for providing the guidance and commands to present content to the end-user from the data filter; and

a data network between the head end and the end-user

5 components for transmitting data.

15. The system according to claim 14, wherein the delivery engine is provided in a plurality of instances to provide for load balancing and capacity requirements.

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16. A storage medium readable by a computer, the medium encoding a computer process to provide a method for targeted content presentation in a communications network, the computer process comprising:

a processing portion for determining targeted user characteristics;

15 and

a processing portion for presenting content in accordance with said characteristics.

17 A system for dataflow management in interactive communications

20 networks, the system comprising:

means for determining characteristics of network components; and

means for managing dataflow in accordance with said determined characteristics.

25 18. A storage medium readable by a computer, the medium encoding a computer process to provide a method for dataflow management in interactive communications networks, the computer process comprising:

a processing portion for determining characteristics of network components; and

30 a processing portion for managing dataflow in accordance with said determined characteristics.